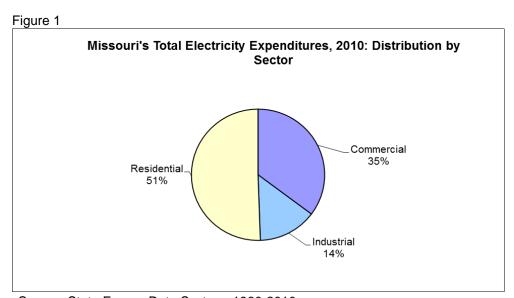


## **Division of Energy**

# Missouri's Total Electricity Bill at a Glance



Source: State Energy Data System. 1960-2010

http://www.eia.gov/state/seds

#### Missouri's Total Electricity Expenditures, 2010: Distribution by Sector

In 2010, Missourians used about 86.1 billion kilowatt-hours (KWh) of electricity for which they paid a total of about \$6.2 billion at an average cost of 7.78 cents per kilowatt-hour.

In 2010, Missouri ranked 21<sup>st</sup> in total expenditures for electricity. Missouri ranked 18<sup>th</sup> among states in residential, 17<sup>th</sup> in commercial expenditures for electricity, and 25<sup>th</sup> in industrial expenditures.

Residential consumers in Missouri paid 51 percent of the state's total electricity bill, and consumed about 37.3 billion KWh or 43 percent of the total usage (See Figure 1). They paid an average price of 8.9 cents per kilowatt-hour, a 3.8 percent increase from the average price in 2009.

Commercial consumers paid about 35 percent of the state's total bill and consumed about 30.4 billion KWh, 38 percent of the total usage. They paid an average price of 7.2 cents per KWh, a 2.9 percent increase from the average price in 2009.

Industrial consumers paid about 14 percent of the state's total bill and consumed about 17.3 billion KWh, 21 percent of the total usage. They paid an average price of 5.5 cents per KWh, a .7 percent increase from the average price in 2009. Large purchasers such as industrial firms pay lower electric rates than small purchasers for a variety of reasons, including lower distribution costs and the ability of large

customers to negotiate contractual arrangements and take advantage of special arrangements, such as interruptible load agreements.

### **Electricity Consumption and Expenditures, 2009-2010**

Consumption for electricity increased in all sectors between 2009 and 2010 (see Figure 2). The largest increase was in the industrial sector at 15.2 percent, followed by the residential sector at 9 percent and the commercial sector at 3.41 percent. Between 2009 and 2010 the total consumption of electricity increased by 8.03 percent.

As consumption increased, the amount of money spent on electricity increased in the residential sector by 13.2 percent, commercial by 6.5 percent, and industrial sectors by 15.9 percent. Overall, total electricity expenditures increased by 10.3 percent across all sectors.

The increase in electricity use in 2010 can be attributed to both differences in the weather and the overall economic situation. As seen in Figure 3, 2010 had more "cooling degree days" than 2009. Cooling degree days are the number of days with temperature above 65 degrees in a month, i.e., warm days. Cooling degree days require more electricity to run air conditioners and refrigeration equipment.

In terms of economics, 2010 was a year of economic resurgence and saw increases in consumption across all energy sectors and types of fuel.

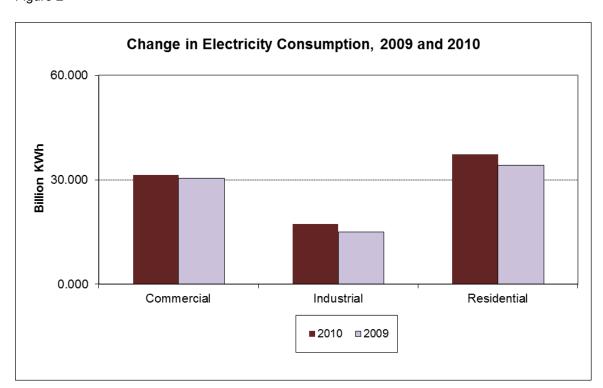
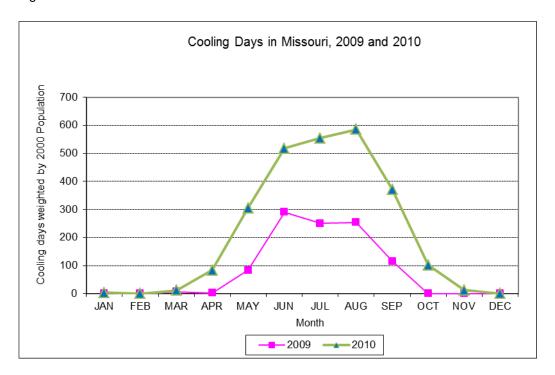


Figure 2

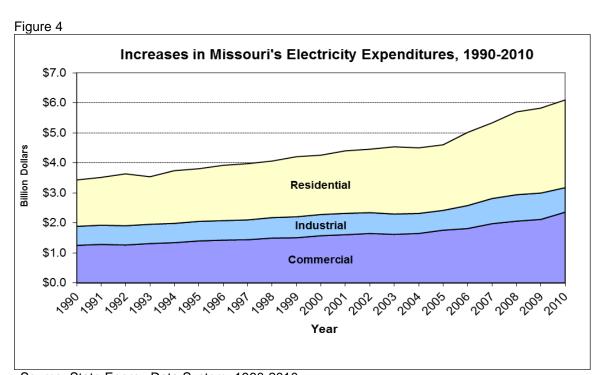
Source: State Energy Data System. 1960-2010 http://www.eia.gov/state/seds

Figure 3



Source: NOAA - National Oceanic and Atmospheric Administration

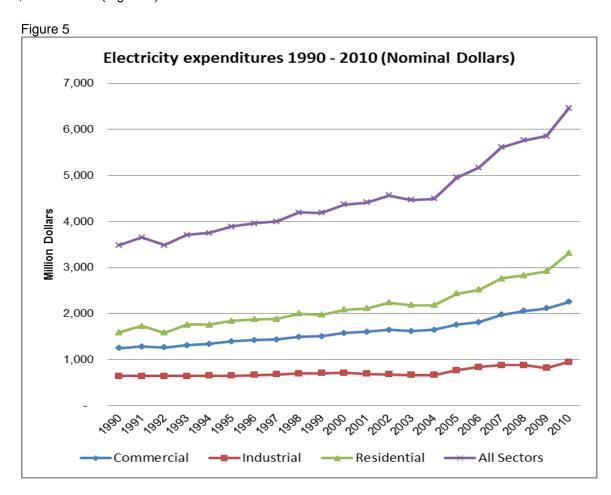
## Changes in Missouri's Total Electricity Bill, 1990-2010



Source: State Energy Data System. 1960-2010 <a href="http://www.eia.gov/state/seds">http://www.eia.gov/state/seds</a>

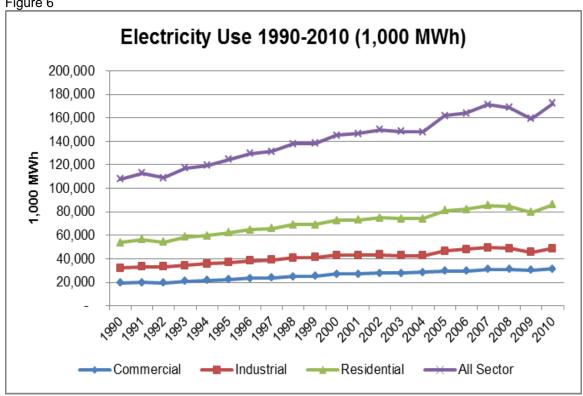
The state's total electricity bill increased about 3.14 percent (measured as the compound annual growth rate) between 1990 and 2010. Total consumption increased 2.37 percent over the same period, as measured by the compound growth rate. Within this overall pattern of increase in expenditures, electricity expenditures fell during the following periods: 1991-1992, 1998-1999, 2002-2003, 2007-2008 and 2008-2009. However, in 2010 the expenditures on electricity increased in the residential sector by 13.2 percent, commercial by 6.5 percent, and industrial sector by 15.9 percent. Total electricity expenditures increased by 10.3 percent across all sectors (Figure 4).

The graphs below show the overall trend in Missouri electricity expenditures per capita, electricity consumption per capita and electricity price per kilowatt-hour between 1990 and 2010. Electricity expenditures are the product of price and level of consumption. The graphs show that overall electricity expenditures have increased since 1990, having the steepest increase between 2005 and 2010 (Figure 6), and peaking in 2010 (see Figure 5). In terms of electricity price, in cents per KWh, between 2004 and 2010 electricity prices saw an increase each year, with residential prices reaching an all-time high of \$.089 in 2010 (Figure 7).



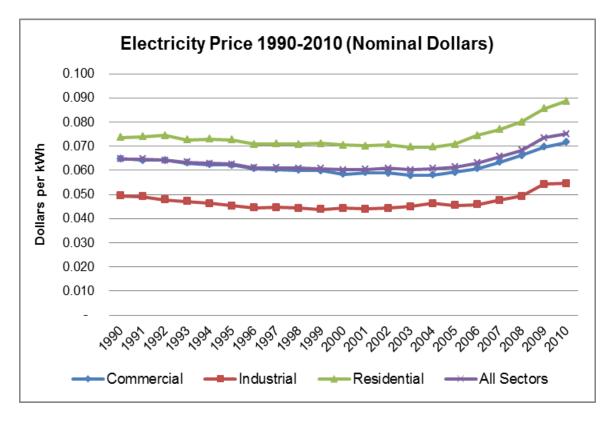
Source: State Energy Data System. 1960-2010 http://www.eia.gov/state/seds





Source: State Energy Data System. 1960-2010 <a href="http://www.eia.gov/state/seds">http://www.eia.gov/state/seds</a>

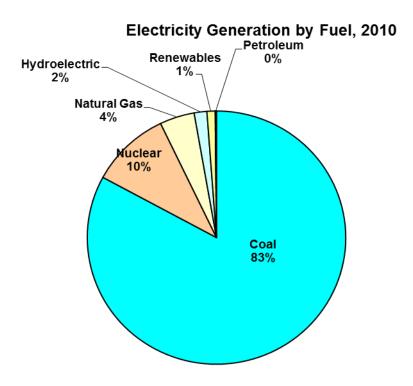
Figure 7



Source: State Energy Data System. 1960-2010 http://www.eia.gov/state/seds

Prices for electricity have steadily increased since 2004 (see Figure 7). Between 2004 and 2010, the price per KWh has increased at a compound annual growth rate of 3.08 percent across all sectors. The highest rate of increase is seen in the residential class, at 3.51 percent, while the commercial class increased at a rate of 3.06 percent and the industrial class increased at a rate of 2.41 percent.

Figure 8



Source: State Energy Data System. 1960-2010 <a href="http://www.eia.gov/state/seds">http://www.eia.gov/state/seds</a>

Missouri's electrical production comes primarily from fossil fuels. In 2010, 93 percent of Missouri's electricity was produced from coal, natural gas or petroleum, with 83 percent coming from coal (see Figure 10). Missouri imports nearly all of these fuels. Missouri can expect continued increases in demand, variation in supply, and most likely, increases in electricity prices. The use of renewable energy sources from wind, biomass and solar (currently at approximately 1 percent), may provide an increasing share of Missouri's electricity profile in the future.

#### **Data Sources**

Statistics presented in this fact sheet are based on energy consumption, price and expenditure data from the State Energy Data System (SEDS), provided by the U.S. Department of Energy's Energy Information Administration (EIA). In addition to the SEDS data, EIA also provides more recent data on average residential, commercial and industrial electricity prices.